

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Sieracki

Serial No.: 10/748,182

Filed: 12/31/2003

Title: Greedy Adaptive Signature  
Discrimination System and Method

Group Art Unit: 2863

Examiner: Bryan Bui

Attorney Docket No.: 90013.0.1

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

This Information Disclosure Statement is submitted:

- ☐ under 37 CFR 1.97(b), or  
(Within three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)
- ☒ under 37 CFR 1.97(c) together with either a:  
☐ Statement under 37 CFR 1.97(e), or  
☒ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first). The Commissioner is authorized to charge \$180.00 to Deposit Account 50-2383 pursuant to 37 CFR § 1.25. The Commissioner is also authorized to charge any underpayment required or credit any overpayment to this Deposit Account.
- ☐ under 37 CFR 1.97(d) together with a:  
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☒ Applicant(s) submit herewith Form PTO 1449-Information Disclosure Citation together with copies, of patents (but not United States patent documents, publications or other information

of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

The relevance of the attached references is that this is the closest art of which Applicant is aware. Applicant submits that the above references taken alone or in combination neither anticipate nor render obvious the present invention. Consideration of the foregoing in relation to this application is respectfully requested.

It is requested that the information disclosed herein be made of record in this application.

Respectfully submitted,

I hereby certify that this Correspondence is being deposited with the United States Postal service with sufficient postage for first class mail in an envelope address to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or the correspondence is being facsimile transmitted to the USPTO, on the date indicated below.

Date of Deposit:

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Typed Name: Frederick C. Williams

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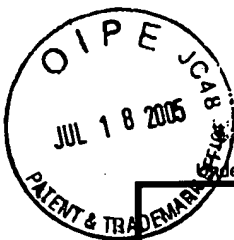
Frederick C. Williams

Attorney/Agent for Applicant(s)

Reg. No. 36,969

Date: July 15, 2005

Telephone No.: (202) 842-0445



*JPW*

PTO/SB/21 (09-04)

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## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	10/748,182
Filing Date	Dec 31, 2003
First Named Inventor	Sieracki, Jeffrey M.
Art Unit	2863
Examiner Name	Bryan Bui
Attorney Docket Number	90013.0.1

Total Number of Pages in This Submission

### ENCLOSURES (Check all that apply)

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment / Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input checked="" type="checkbox"/> Information Disclosure Statement<br><br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Reply to Missing Parts/ Incomplete Application<br><input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____<br><input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance communication to (TC)<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br><p style="text-align: center;"><b>PTO 1449</b></p> |
|---|--|---|

Remarks

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Burns & Levinson LLP		
Signature	<i>Frederick C. Williams</i>		
Printed name	Frederick C. Williams		
Date	<i>July 15, 2005</i>	Reg. No.	36,969

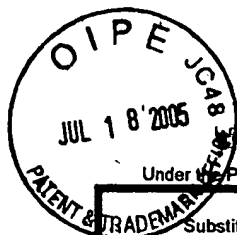
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<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	10/748,182	
			Filing Date	12/31/2003	
			First Named Inventor	Sieracki	
			Art Unit	2863	
			Examiner Name	Bryan Bui	
Sheet	1	of	2	Attorney Docket Number	90013.0.1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	1	US-6,587,507 B1	07-01-2003	Chui, et al.	
	2	US-5,764,921	06-09-1998	Banham, et al.	
	3	US-5,699,121	12-16-1997	Zakhor, et al.	
	4	US-2003/0179825 A1	09-25-2003	Sekiguchi, et al.	
	5	US-2003/0165331 A1	09-04-2003	Van Der Schaar	
	6	US-2003/0108101 A1	06-12-2003	Frossard, et al.	
	7	US-2003/0103563 A1	06-05-2003	Amini, et al.	
	8	US-2003/0058943 A1	03-27-2003	Zakhor, et al.	
	9	US-2003/0009332 A1	01-09-2003	Heusdens, et al.	
	10	US-2002/0159518 A1	10-31-2002	Bottreau, et al.	
	11	US-2001/0028683 A1	10-11-2001	Bottreau, et al.	

FOREIGN PATENT DOCUMENTS						
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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				

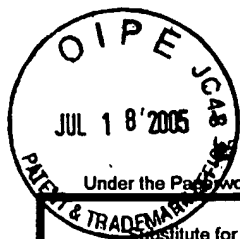
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	12	MALLAT, S.G. and ZHANG, ZHIFANG, "Matching Pursuits with Time-Frequency Dictionaries," IEEE Transactions on Signal Processing, 41(1993)3397-3415.	

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet

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**Complete if Known**

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Filing Date	12/31/2003
First Named Inventor	Sieracki
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Attorney Docket Number	90013.0.1

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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**FOREIGN PATENT DOCUMENTS**

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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	13	BERGEAUD, F. and MALLAT, S., "Matching Pursuit of Images," name of publication unknown, published by Academic Press, Inc. 1995	
	14	DAVIS, G. and MALLAT, S., "Adaptive Greedy Approximations," Contract Research Report substantially identical to doctoral dissertation of Geoffrey Davis, New York University Graduate School of Arts and Science, 1994, Catalog Number LD3907.G7 1994.D38	
	15	LEVIATAN, D. and TEMLYAKOV, V. N., "Simultaneous Approximation By Greedy Algorithms," Report, funded by National Science Foundation Grant DMS 0200187 and Office of Naval Research Grant N00014-96-1-1003; not known whether this report was ever published; possibly "made available" as a preprint sometime during 2003.	

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